October 22, 1953

MEMORANDUM

For:

Edward Heller

Subject:

Health and Safety Precautions for the Castle Test Series.

Wednesday morning, October 21, discussions were had with Dr. Gordon M. Dunning concerning the safety precautions being taken for the Castle test series.

Dr. Dunning stated that the tests which had originally been scheduled for February 15, were now tentatively scheduled to start March 1. Six shots are now scheduled with a seventh pending. Four of these shots will be in the Eniwetok atoll and the remainder in the Bikini atoll.

There are populous islands within 100 to 150 miles of both of these atolls. The closest atoll to Eniwetok is south and west. about 150 miles, and has a native population of about 175 people. There are two or three atolls within 200 miles of Bikini atoll and they lie to the east and southeast of Bikini.

During the Ivy test series, the island southwest of 200 Eniwetok was evacuated. Bowever, the evacuation proved completely unnecessary as there was no fall out in this area; the radio-active cloud going north and east from Enivetok as predicted. During the Castle tests no provisions are being made to evacuate any of the islands within the fall out area. However, there will be enough shipping in the area to take care of amergency evacuation if that should be necessary, according to Dr. Dunning, Dr. Dunning stated that normally a high degree of protection could be obtained by getting the people under roof for six to eight hour period during the maximum fall out. The main objection to evacuation is the high cost and the logistic problems presented in supporting such an operation. It is planned to discuss this problem further with Dr. Bugher, Director of the Division, upon his return from his vacation in the middle of Movember.

rantown and CTONAL SECURITY INTORMATION Records of the JCAE General Subject Files, Box 80 Weapers Fests Pourse Prostag Grand (Castle) 1954.

CLASSIFICATION CANCELLED AUTHORITY: DOE/SA-20 BY: D. R. GILSON, DATE 2-17.

SECRET

Memo for File (Cont'd)

For the Castle tests a far more elaborate sampling system will be used than has been used on any previous test. All of the nearby islands will have automatic recording machines for fall out data. In addition, many of them will be manned and these manned stations will send in fall out data on a 4 hour basis. Aerial sampling will be carried out on the basis of information received from these outlying islands indicating the path of the radio-active cloud.

In addition, an elaborate system of world-wide sampling will be carried out at Army, Navy and Air Force stations thoughout the world-together with certain State Department installations. This world-wide sampling will consist simply of putting out gummed paper sheets about one foot square. These sheets will be exposed to the atmosphere for 24 hours; then folded up and returned by mail to AEC. Two stations, about one hundred yards apart, will be located at each data collection point.

The system has been worked out so that no skill is required by the station operator and a series of forms have been worked up so that the station operator has a minimum of routine work to carry out.



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